VitaminDWiki.com*

Founded 2009   - Nonprofit

10,000+ Vitamin D studies

6,000+ Charts and tables

1,000+ Articles on related topics

500+ Intervention trials
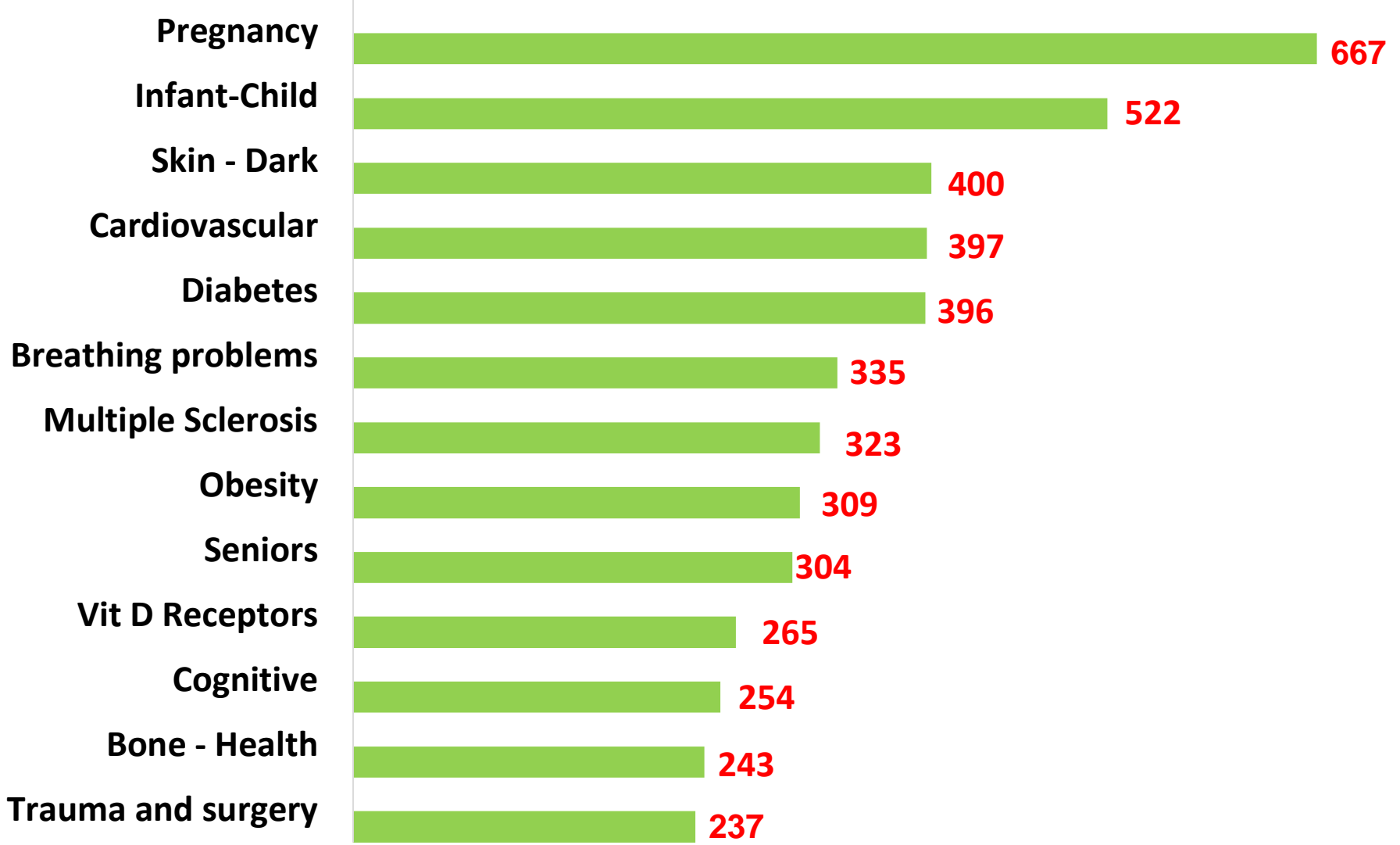
400+ Meta-analyses
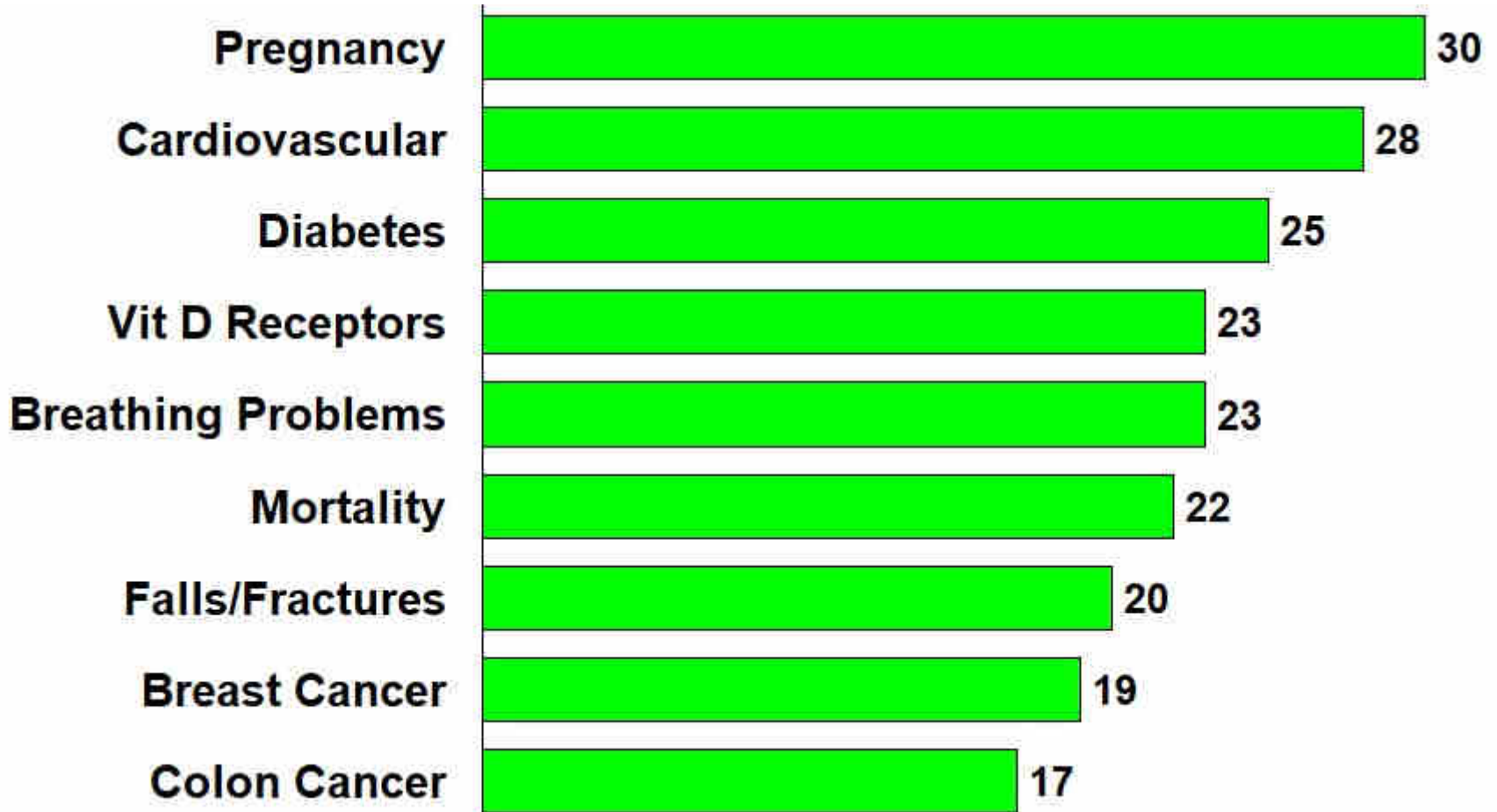
100+ Languages to read and search

160+ Categories

70+ Overviews

*Larger than the next 5 Vitamin D websites combined
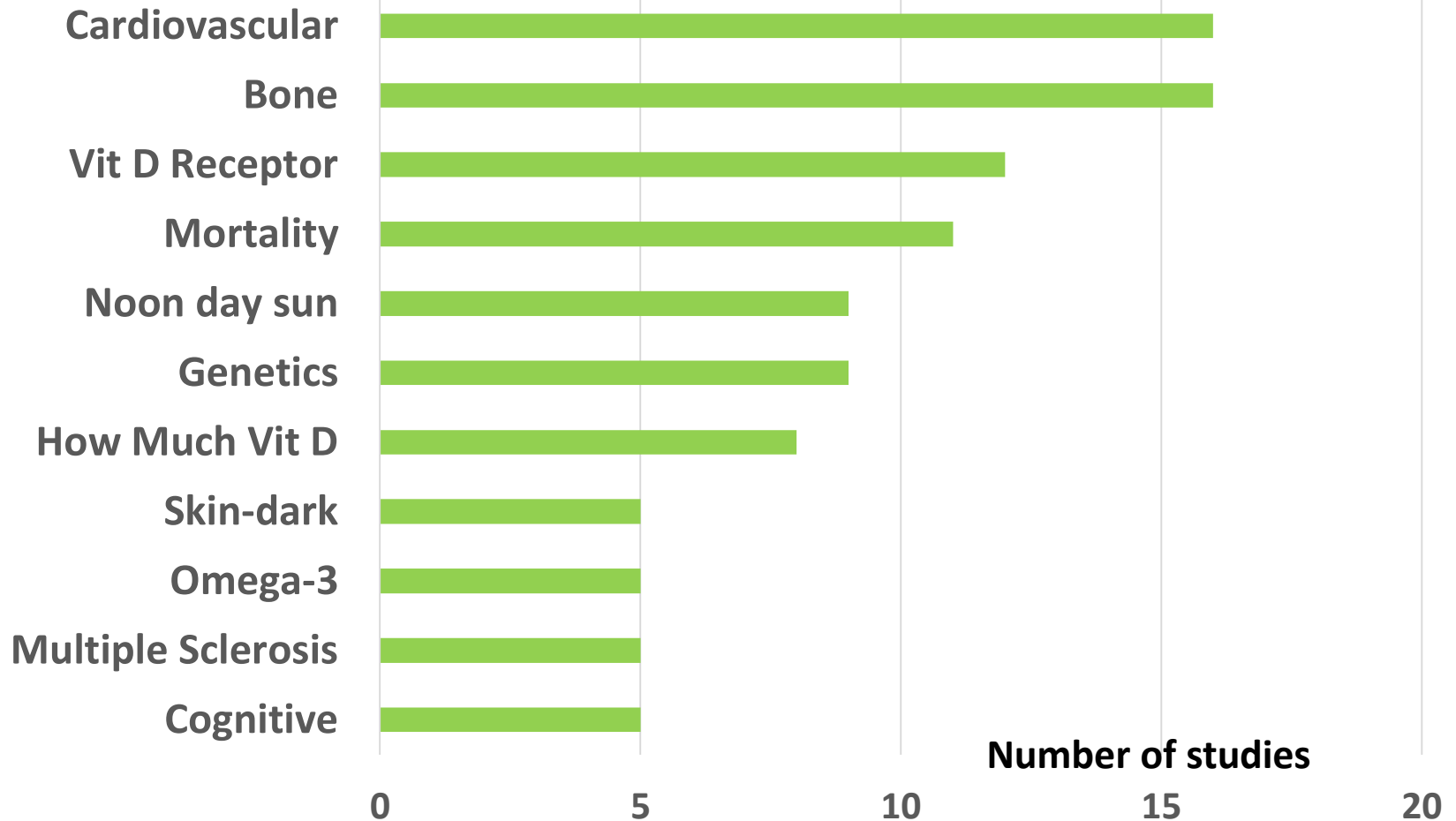
Number of Studies*

Category	Number of Studies
Pregnancy	667
Infant-Child	522
Skin - Dark	400
Cardiovascular	397
Diabetes	396
Breathing problems	335
Multiple Sclerosis	323
Obesity	309
Seniors	304
Vit D Receptors	265
Cognitive	254
Bone - Health	243
Trauma and surgery	237

*In Top 13 of 60 health categories

VitaminDWiki.com

400+ Meta-analyses*

Category	Count
Pregnancy	30
Cardiovascular	28
Diabetes	25
Vit D Receptors	23
Breathing Problems	23
Mortality	22
Falls/Fractures	20
Breast Cancer	19
Colon Cancer	17

*In Top 9 of 30 health categories having meta-analyses

VitaminDWiki.com   is.gd/MetaD

Explore studies with overlapping categories on VitaminDWiki

For example, check out Breast Cancer and …

Vitamin D

#3 most important contributor to health
#1 most cost effective

#1 Healthy food
Hard to get after 1930

#2 Exercise

#5 Omega-3

#4 Magnesium

#3 Vitamin D

Boron

Zn

I

Vit K2

Size = contribution to health
Overlap = synergy
Line thickness = cost

VitaminDWiki.com May 2019   is.gd/Health123
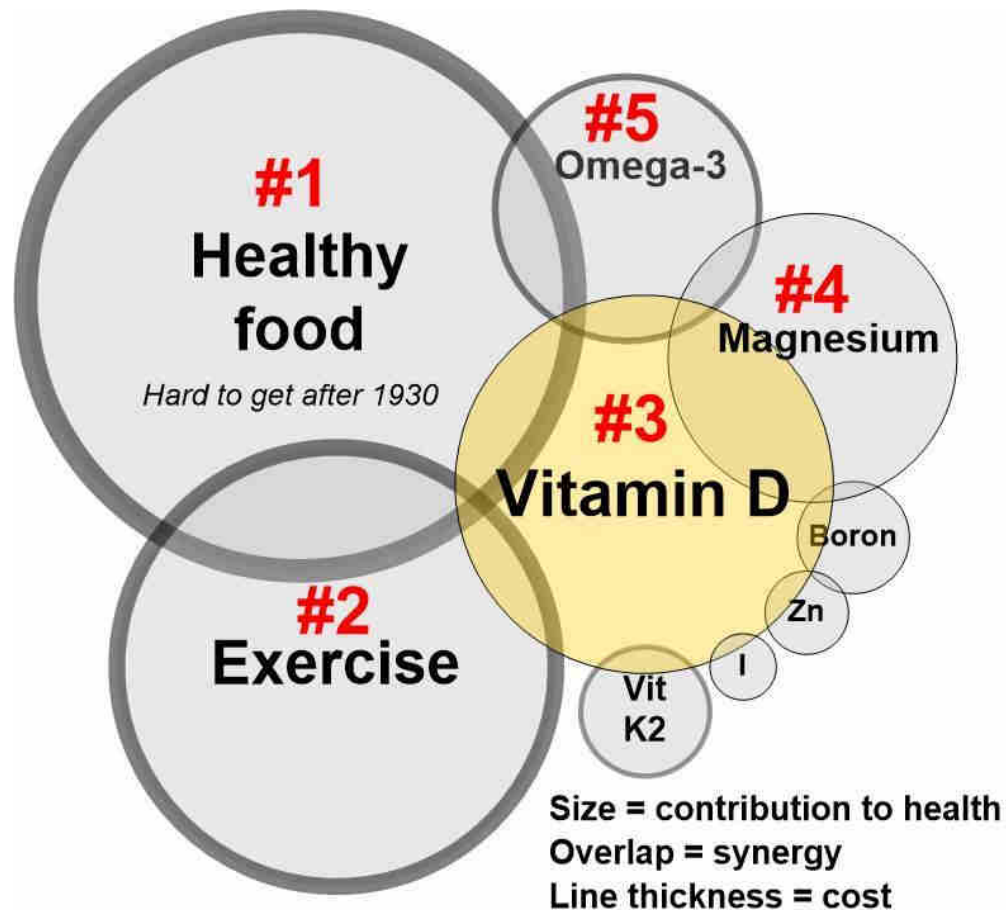
Vitamin D: (Sources) and Products

Use if Gut, Liver, & Kidneys are all healthy

Supplement including plant-based

Food
Fatty fish | Organic meats

Sun/UVB

D3 Inhaled

Use if Gut is not healthy or poor compliance

D3 Inject

Sublingual

Gut-friendly emulsion

Topical

Muscle or abdomen

Gut

Fat
weight loss

Skin

Use if Liver is not healthy

Calciferol in Blood

Calcidiol drug

Liver

breast milk

placenta

Calcidiol
Meat, eggs, herb, HyD

Gut

Inject

25(OH)D = **Calcidiol** in Blood (blood test)

Use if Kidneys not healthy

Calcitriol

Kidneys
Omega-3 helps

Gut

Inject

Tissues

1,25(OH)$_2$D = **CALCITRIOL** in Blood

More from tissues than from Kidney

VitaminDWiki 05/2019

https://is.gd/GettingD

Cells

Vitamin D Receptors
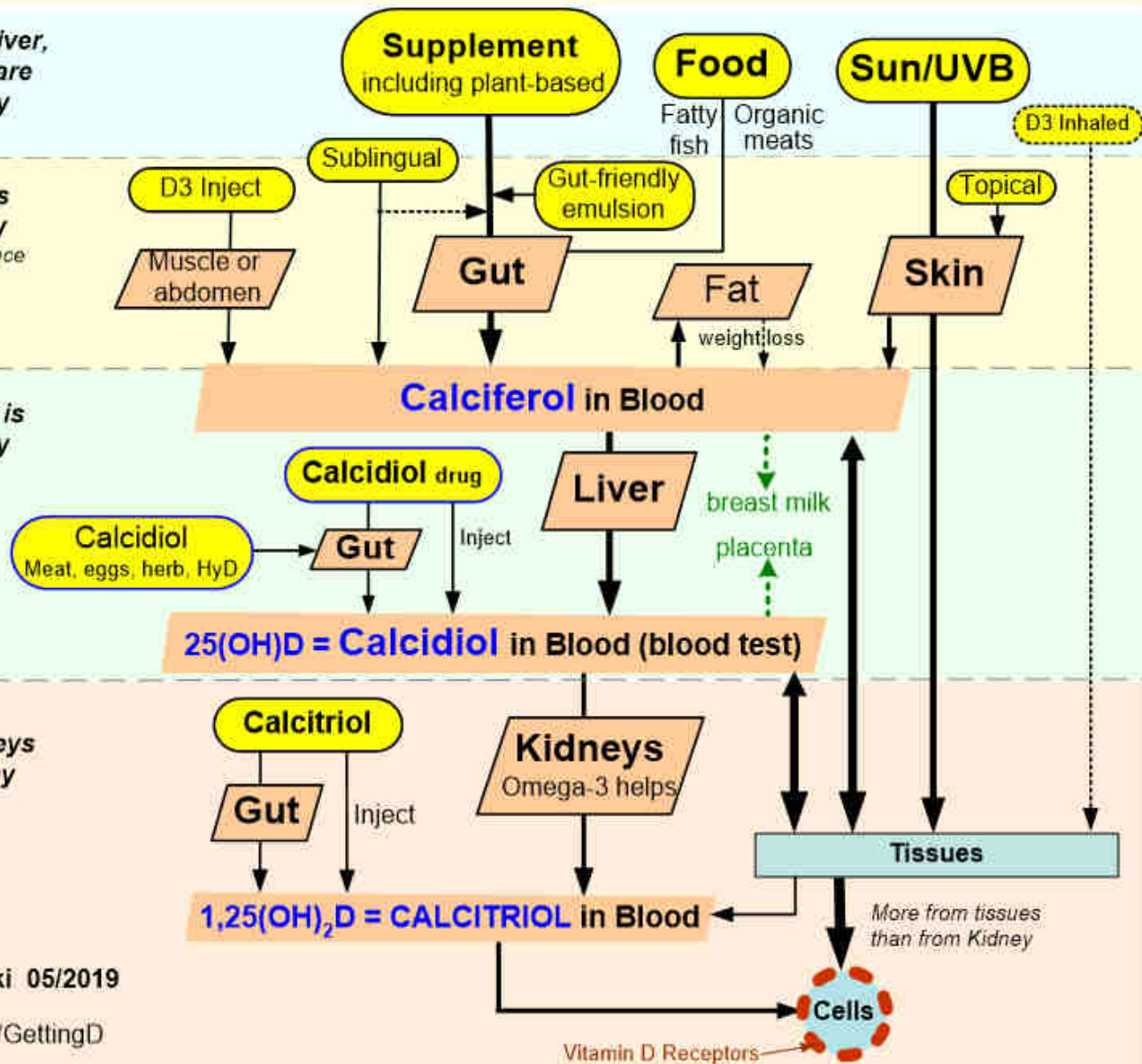
4,000 IU/day of Vitamin D is a good dose

19 organizations agree*

US
Institute of Medicine
Endocrine Society, Vitamin D Council
American Academy of Pediatrics (AAP)
American Academy of Dev. Medicine and Dentistry

Europe
Scientific Advisory Committee on Nutrition (UK)
European Food Safety Authority
Central Europe consensus
Italian Endocrinologists, Italian Consensus
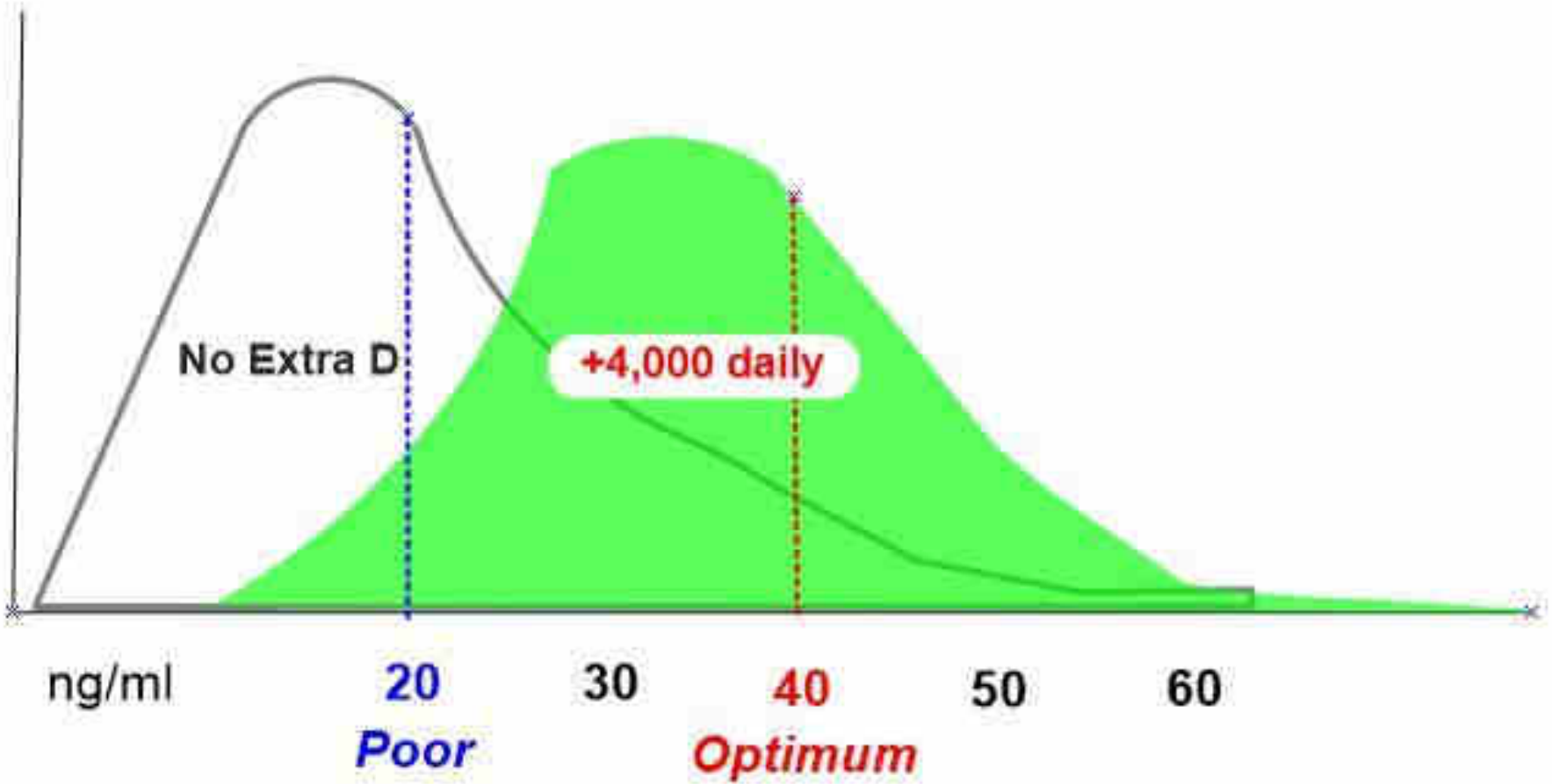Nutrition - French Society of Paediatrics
European Society for Paediatric Gastroenterology ....
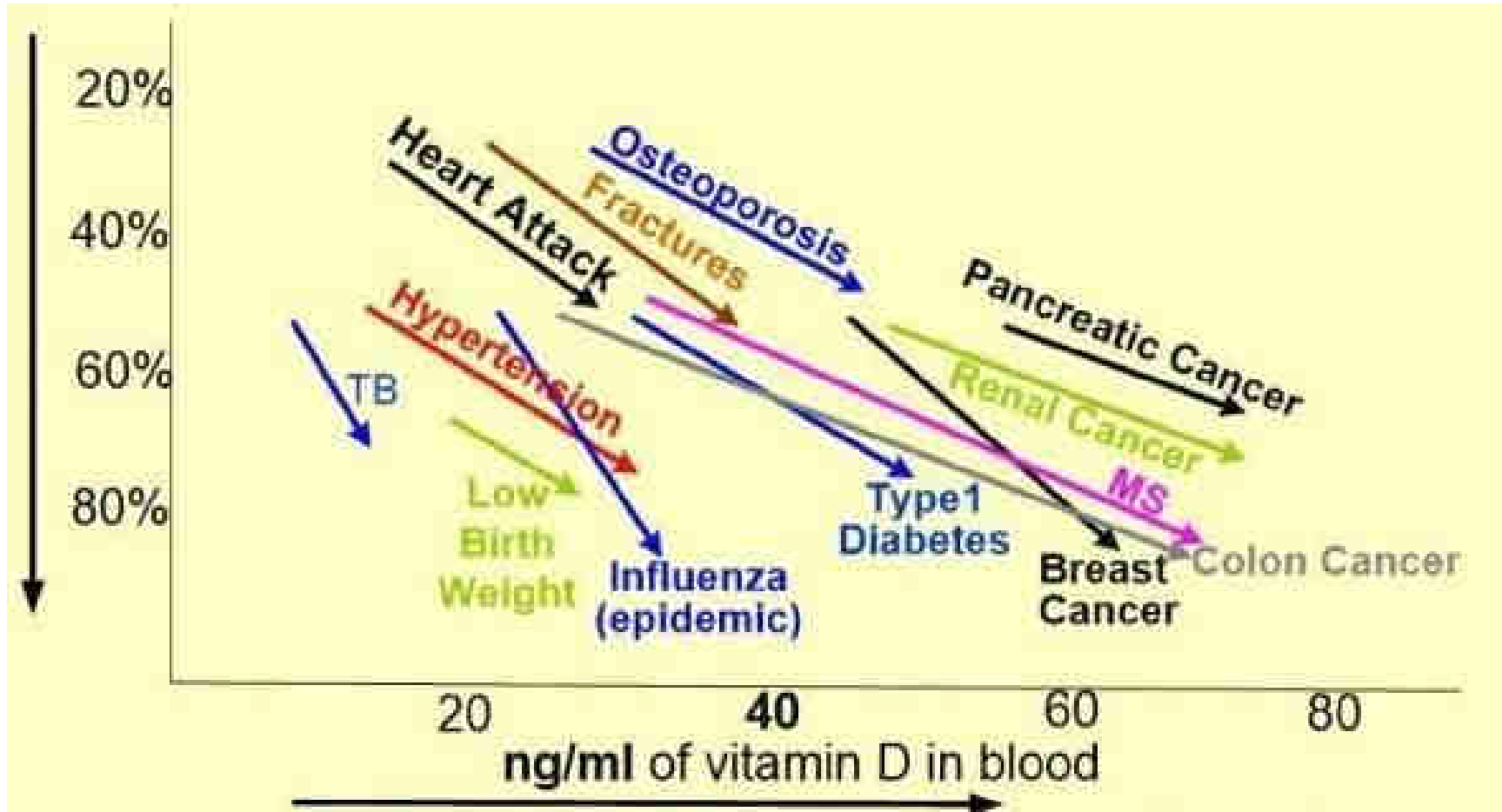European Society for Clinical and Economic Aspects of Osteo...
The Nordic Council of Ministers
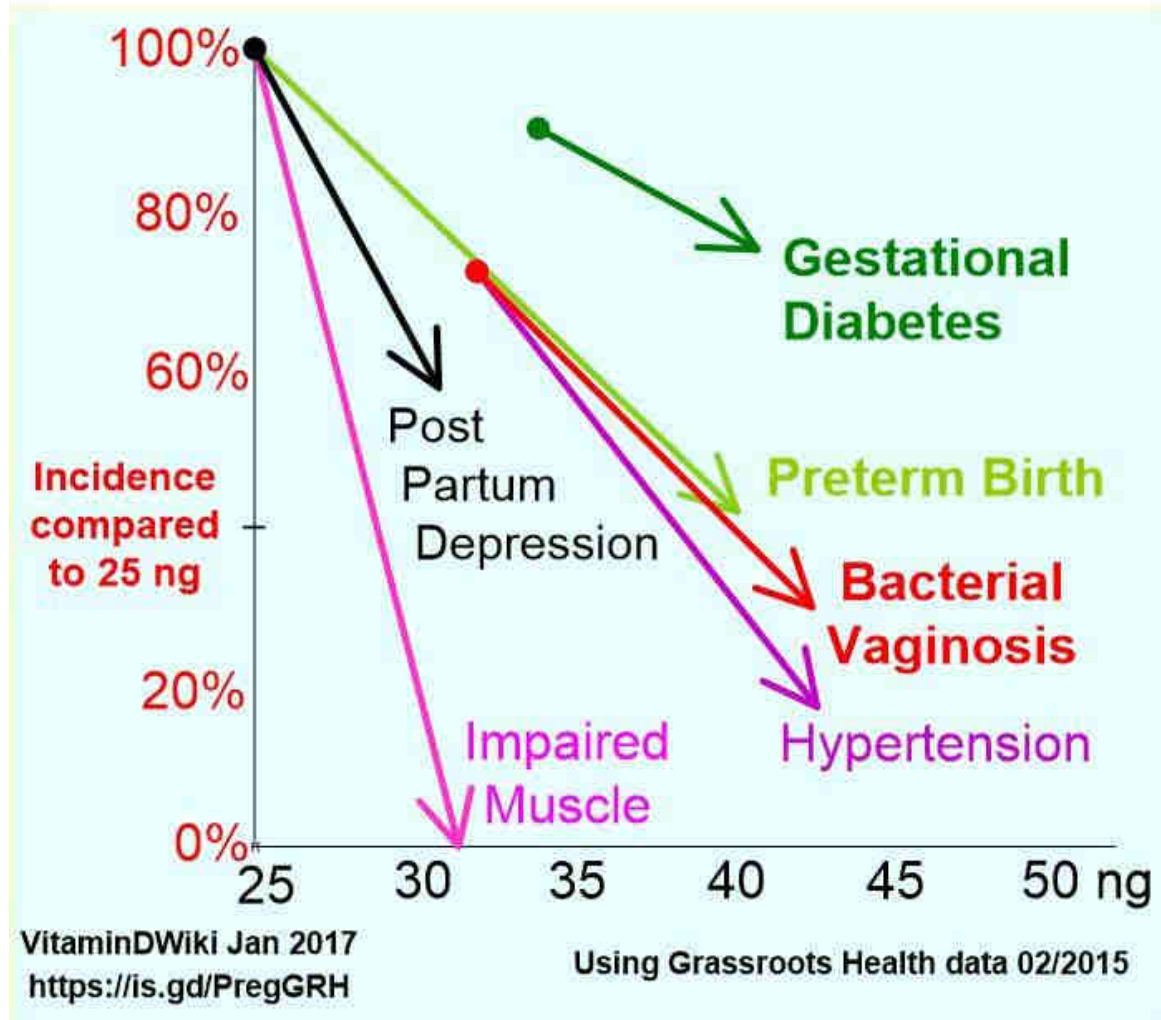Health Council of the Netherlands

VitaminDWiki.com   is.gd/Vitd4000

***48 scientists also endorse 40-60 ng**

4,000 IU daily results in more people getting a good level of vitamin D

No Extra D

+4,000 daily

ng/ml 20 30 40 50 60

Poor Optimum

VitaminDWiki.com

More Vitamin D decreases major health problems

VitaminDWiki.com   is.gd/GRH2013

More Vitamin D decreases pregnancy problems

VitaminDWiki Jan 2017
https://is.gd/PregGRH

Using Grassroots Health data 02/2015

Think outside the blood test

This* is the only gene recognized by the Vitamin D blood test

But any of the genes downstream from the test * could also prevent Vitamin D from getting to your cells

30% of the time, the blood test does not accurately measure how much Vitamin D is actually available to the body

Vitamin D from skin or mouth

Vit D in Blood

*CYP27A1 gene in Liver

Blood test — Calcidiol in Blood

*Vit D Binding Protein - Liver, etc

*CYP27B1 gene in Kidney

Calcitriol in Blood

*CYP24A1

Tissues

Vit D in all Tissues

* CYP2R1 gene in Tissue

Calcidiol in Tissue

*CYP27B1 gene in Tissue

Calcitriol in Tissue

*Vitamin D Receptor gene

Cells

VitaminDWiki May 2019
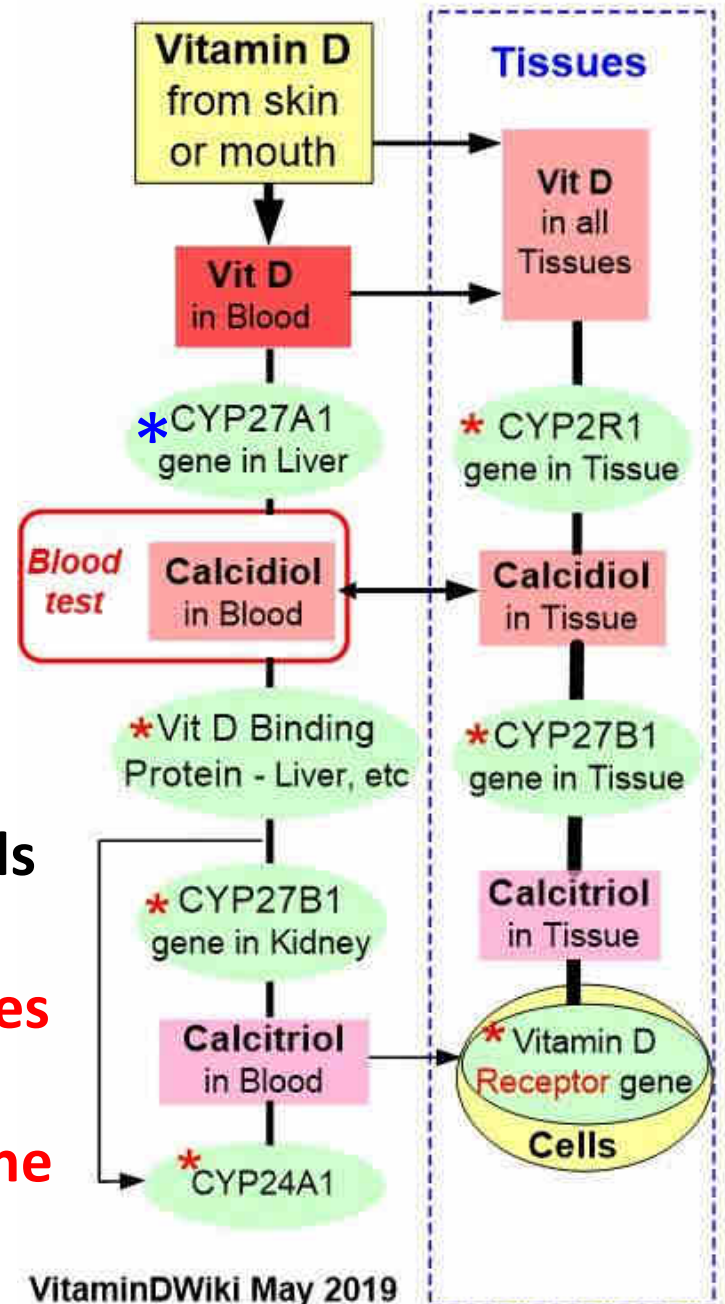
Deactivation of Vitamin D receptors*

Increases by at least 3X the risk of:
Sepsis, Crohn's, Respiratory Tract Infections, Ulcerative Colitis, Coronary Artery Disease, Breast Cancer, Pre-term Birth, Multiple Sclerosis, Ischemic Stroke, Alzheimer's …

Is caused by some diseases, including some Cancers

*****Effect is lessened by certain supplements known to improve health, such as Resveratrol, Omega-3, Zinc, Quercetin, Curcumin, Ginger, …**

VitaminDWiki.com   is.gd/GeneD

Reactivation of Vitamin D receptors

Each of the following have been found to increase Vitamin D in the cells: magnesium, omega-3, resveratrol, quercetin, zinc, curcumin, ginger, intense exercise, large doses of vitamin D, progesterone, paricalcitol, maxacalcitol

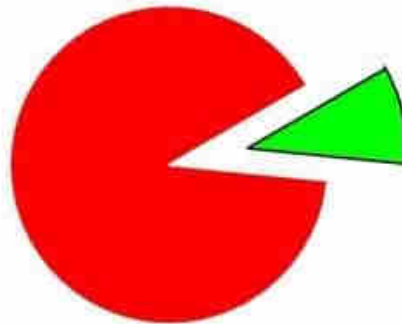*Unfortunately, it is not yet known how much activator is needed for any given individual*

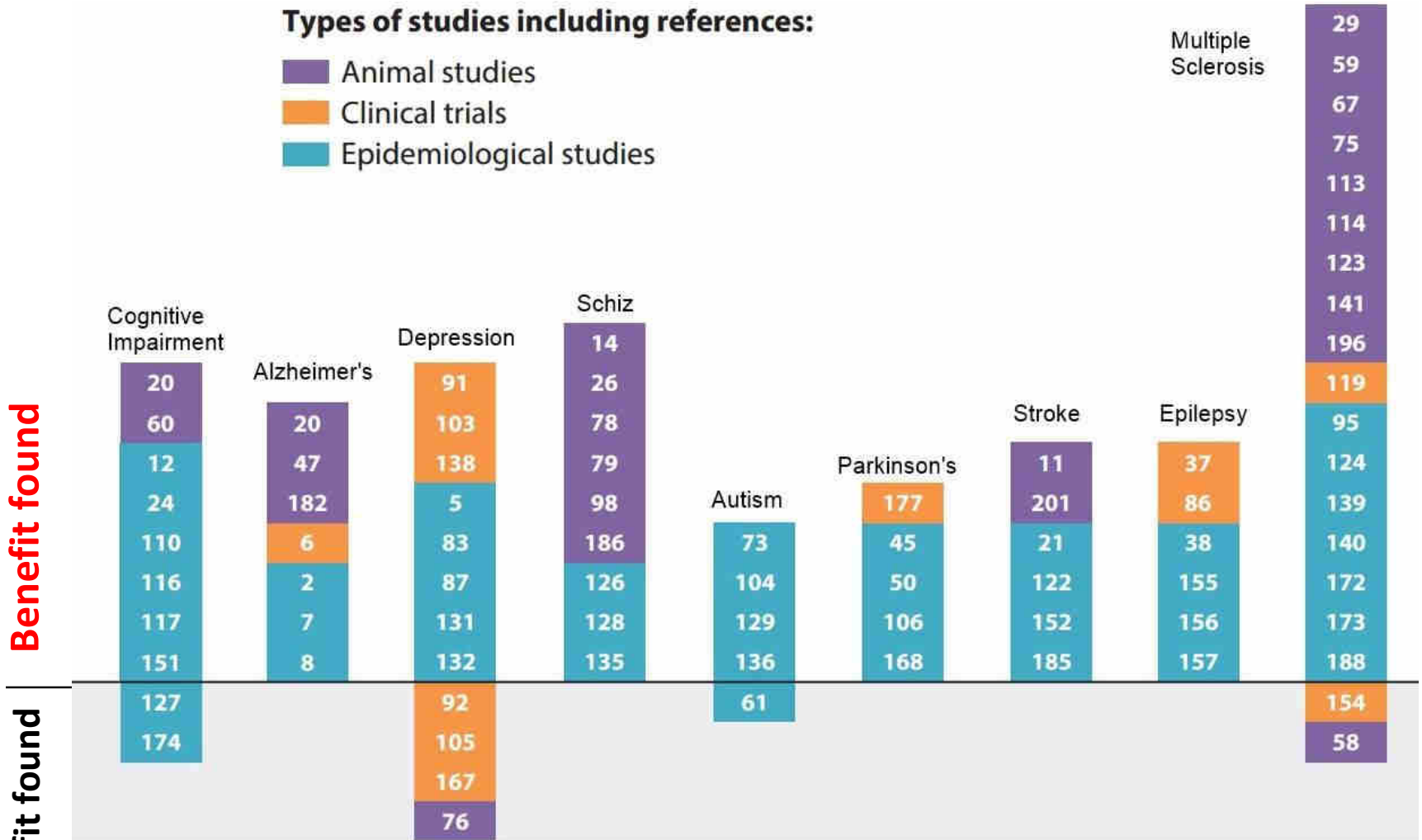VitaminDWiki   is.gd/VitDReceptor
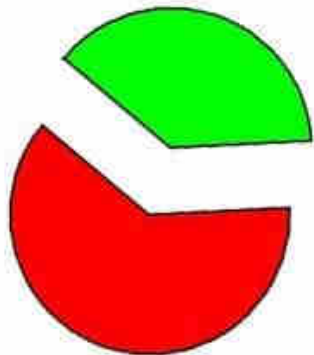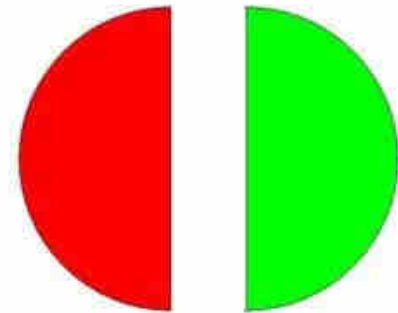
Vitamin D helps the brain

Types of studies including references:
- Animal studies
- Clinical trials
- Epidemiological studies

Benefit found / **No benefit found**

Short URL = is.gd/VitDBrain published 2014

Vitamin D Myths - SUN

10 minutes is enough
- Nope - only if 12 conditions are true: i.e. under 40, summer, white skin, lying down, little clothing

Same amount of vitamin D generated in each portion of skin
- Nope - for example, 8X more Vitamin D generated by hands and face

No Vitamin D from the winter sun
- Nope - winter can provide 500 IU Vitamin D

Should limit time in the sun to reduce cancer
- Nope - low exposure will INCREASE total cancer by 50X

Same IU of Vitamin D to everyone from the sun
- Nope - 4X difference between individuals,
  - without considering additional differences due to skin color, age, obesity, etc.

Sunscreen decreases Skin Cancer
- Nope - and sunscreen often INCREASES Skin cancer by being in sun too long

Short URL= is.gd/MythsSun *VitaminDWiki.com*

Vitamin D Myths - DOSE

600 IU is enough
- Nope - US govt admitted the mistake, 19 organizations and Dr. Holick agree: 4,000 IU is recommended

Everyone should get the same dose
- Nope - proper dose varies with weight/obesity, skin color genes, disease, etc

2 months restores levels, on-going dose is not needed
- Nope - restoration often needs 4-6 months (without a loading dose),
- and needs to be continued for life

Daily dosing is best
- Nope - 32 trials proved benefit from weekly or bi-weekly,
- perhaps infrequent dosing is better than daily

Can get enough Vitamin D from milk
- Nope - 10+ glasses of whole milk to get just 800 IU

Short URL = is.gd/MythsDose   *VitaminDWiki.com*

Vitamin D Myths - OTHER

Oil-based Vitamin D is OK

- Nope - Oil-based D is not OK if no oil at the meal or no gallbladder

Only need Vitamin D

- Nope - Cofactors are needed if take >4,000 IU (Magnesium, Vit K, Omega-3, etc)

Can get enough Vitamin D from food

- Nope: No longer does meat, lard have much Vitamin D
- Nope: No longer do people eat much fatty or wild caught fish
- Nope: No longer do people often eat organ meats
- Nope: No longer does food have enough Magnesium to utilize Vitamin D

Little Vitamin D in meat and eggs

- Nope: Studies rarely consider the semi-activated form Vitamin D
- underestimated the amount available from meat and eggs by a factor of 6 to 9

>10,000 IU can be toxic

- Nope - Large doses are OK if cofactors are taken correctly

Blood test: Indicates how much Vitamin D is getting to tissue

- Nope - Vit D can be limited by one or more of 5 genes downstream from Vit D test,
- especially the Vitamin D Receptor gene

Short URL = is.gd/MythsOther *VitaminDWiki.com*

Which organizations will gain by increased levels of Vitamin D?

1) **Employers: Cost-effective way to increase productivity: Reduce common ailments by providing free vitamin D**

   Decrease Flu, Cold, Headache, feel poorly
   Reduces Sick Leave,
   Reduces working while sick

2) **Professional Football team: Greatly decrease sprains, concussions, while improving performance**

VitaminDWiki.com

High Dose Vitamin D Protocols

	Dr. Coimbra books 2018 2016	Dr. Somerville Optimal Dose (book)	Dr. Gominak	Mr. Batcheller
Health problem	MS and auto-immune	All - emphasis on sleep, flu, pain, obesity	Sleep	Cluster Headaches
Number of people (2019)	20,000	5,000	5,000	1,900
Vitamin D target	PTH is target (typically 150ng)	100-140+ ng	60-80 ng	80 ng
Vitamin D dose (K = 1,000 IU)	20K - 200K 1,000 IU/kg	30K	2K + monthly test increasing dose until goal	4K - 40K 110 IU/kg
Magnesium *	Mg	Mg	- - -	Mg
Vitamin K2	K2	K2	- - -	K2
Omega-3 *	O-3	O-3	- - -	O-3
Vitamin B...	B2, B9, B12	B3	B50-B100 3 months	B50

Short URL = is.gd/HighD

Inhaled D exploration by VitaminDWiki

Lungs can fully activate inhaled Vitamin D

Vitamin D mists can be made by atomizers from diluted Vitamin D emulsions

Atomizers eject about 150 IU of Vitamin D per second

10 people tested as of May 2019 - all able to breathe better in 10 minutes
Initial testing with smoke, church incense, asthma, intense exercise, COPD

Experimenting with 6 emulsions and 6 inhalers as of May 2019*

6 seconds inhaled daily for a month created about 30X more response than oral

* The cost of inhaler plus Vitamin D emulsion Is typically less than $50

10 minute Vitamin D test

**Nanospeed has sold >1 million of their qualitative testers globally.**

Since Feb 2018 Nanospeed has also sold quantitative testers at $13 in quantity including the readout device

"Correlation coefficient of 93.5% in comparison to LCMS assay"
Approximately 12% accuracy (example: within 5 ng of 40 ng)

As of May 2019 both testers can be used in the US, but not sold nor billed

Nanospeed is making a smartphone app that can take the place of the readout cube

VitaminDWiki.com   *is.gd/FastVitDtest*
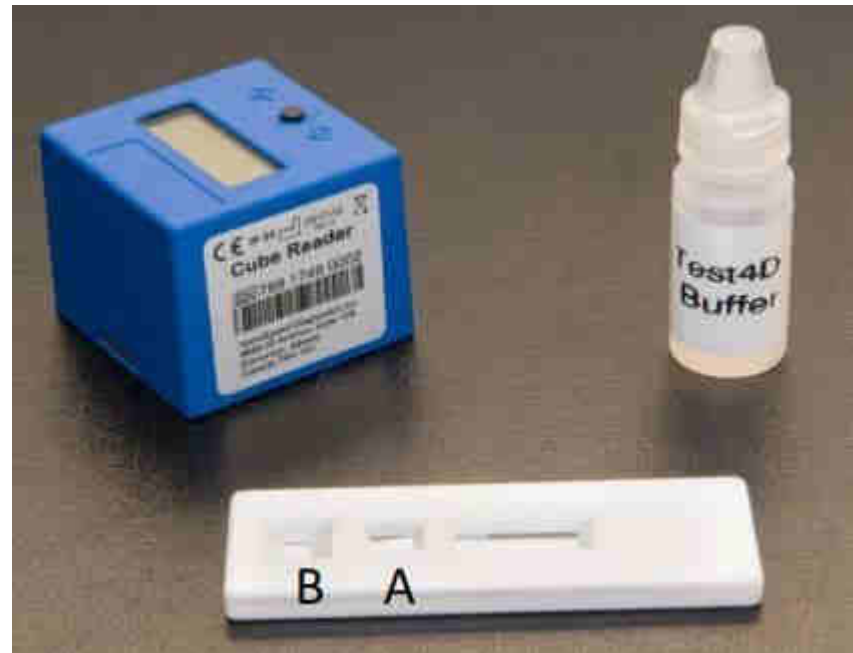
Ouch-less blood sampling

Sample in-home then mail in to get results for

Vitamin D + Omega-3 + Magnesium + Zinc

+ Copper + Vitamin B12 + Vitamin E + Selenium

$99 for the test AND they send 1 month supply

of the nutrients you are deficient in (daily packets)

www.baze.com started 2018 - US only initially

**Sampling done on a weekday before breakfast.
Device sucks about 4 drops of blood from your
leg via microneedles in a few minutes.**

VitaminDWiki.com

"Vitamin D" shirt

Get up to 70% more Vitamin D if wear a "Vitamin D" vs a normal shirt

"Vitamin D" cloth SPF = 2
Standard cloth SPF = 50

Cooltan.com, for example, makes clothing with measured SPF =2

VitaminDWiki.com   is.gd/cooltanD